



210209987 Revised Addendum to 201104879 8/16L-SOIC-150mils Additional Assembly, Test

PCN Issue Date: 2/9/2021

Effective Date: 2/10/2021

PCN Type: Addendum; Assembly

Description of Change

This previous addendum (see PCN 210119976) to PCN 201104879 did not include the qualification report. This revised addendum for PCN 201104879 Si82xx/Si84xx/Si86xx 8/16L-SOIC-150mils Additional Assembly, Test and Ship Site includes the qualification report and also includes the removal of the Si822x products from the affected list in the Product Identification Section. The correction is listed in the Product Identification section of this PCN. The qualification report is included in the appendix. The original PCN is listed below:

Silicon Labs is pleased to announce the successful qualification of UTAC Thailand (UTL) as an additional assembly, test and shipping site for Si82xx/Si84xx/Si86xx, 8/16L-SOIC-150mils. UTL is an existing assembly, test and shipping site for Silicon Labs, and is certified to ISO9001, ISO14001 and IATF16949.

UTL Ship Address:
UTAC Thai Limited
Wellgrow Industrial Estate, 73 Moo 5, Bangna-Trad (KM.36)
T.Bangsamak, Bangpakong Chachoengsao 24180 Thailand
Bangkok
Zip code: 24180

As of the effective date of the PCN, Silicon Labs may assemble, test and ship from either of the qualified assembly, test and shipping sites.

Reason for Change

The additional assembly and test locations will provide additional capacity for supply assurance.

Impact on Form, Fit, Function, Quality, Reliability

There is no impact on form, fit, function, quality, or reliability. The devices assembled and tested at UTL will comply with Silicon Labs' relevant datasheets and quality levels.

The same test equipment including ATE, test load board hardware, and test application software will be used at both locations.

Product Identification

Existing Part #
SI82305B-D-IS1
SI82305B-D-IS1R
SI82308B-D-IS1
SI82308B-D-IS1R
SI8230AC-D-IS1
SI8230AC-D-IS1R
SI8230BC-D-IS1
SI8230BC-D-IS1R
SI8231AC-D-IS1
SI8231AC-D-IS1R
SI8231BC-D-IS1

SI8231BC-D-IS1R
SI8232AC-D-IS1
SI8232AC-D-IS1R
SI8232BC-D-IS1
SI8232BC-D-IS1R
SI8233AB-D-IS1
SI8233AB-D-IS1R
SI8233AC-D-IS1
SI8233AC-D-IS1R
SI8233BC-D-IS1
SI8233BC-D-IS1R
SI8234AC-D-IS1
SI8234AC-D-IS1R
SI8234BC-D-IS1
SI8234BC-D-IS1R
SI8235AC-D-IS1
SI8235AC-D-IS1R
SI8235BC-D-IS1
SI8235BC-D-IS1R
SI8237AC-D-IS1
SI8237AC-D-IS1R
SI8237BC-D-IS1
SI8237BC-D-IS1R
SI8238AC-D-IS1
SI8238AC-D-IS1R
SI8238BC-D-IS1
SI8238BC-D-IS1R
SI8400AB-A-IS
SI8400AB-A-ISR
SI8400AB-B-IS
SI8400AB-B-ISR
SI8401AB-B-IS
SI8401AB-B-ISR
SI8405AB-B-IS1
SI8405AB-B-IS1R
SI8420BB-D-IS
SI8420BB-D-ISR
SI8421AB-D-IS
SI8421AB-D-ISR
SI8422AB-D-IS
SI8422AB-D-ISR
SI8423ETA-D-IS
SI8423ETA-D-ISR
SI8440BA-D-IS1
SI8440BA-D-IS1R
SI8600AB-B-IS
SI8600AB-B-ISR
SI8605AB-B-IS1
SI8605AB-B-IS1R
SI8605AC-B-IS1
SI8605AC-B-IS1R
SI8610BC-B-IS
SI8610BC-B-ISR
SI8620BB-B-IS
SI8620BB-B-ISR
SI8620BC-B-IS
SI8620BC-B-ISR
SI8621BC-B-IS
SI8621BC-B-ISR
SI8621EC-B-IS
SI8621EC-B-ISR
SI8622BC-B-IS
SI8622BC-B-ISR
SI8622EC-B-IS
SI8622EC-B-ISR
SI8640EC-B-IS1
SI8640EC-B-IS1R

SI8641EC-B-IS1
SI8641EC-B-IS1R
SI8642AB-B-IS1
SI8642AB-B-IS1R
SI8645BA-B-IS1
SI8645BA-B-IS1R
SI8651EC-B-IS1
SI8651EC-B-IS1R
SI8660AB-B-IS1
SI8660AB-B-IS1R
SI8660BA-B-IS1
SI8660BA-B-IS1R

Last Date of Unchanged Product: 2/10/2021

Qualification Samples

Qualification samples available upon request.

Customer Response

Lack of acknowledgment of the PCN within 30 days constitutes acceptance of the change, Ref. JEDEC-J-STD-046.

To request further data or inquire about this notification, please contact your Silicon Labs sales representative. A list of Silicon Labs sales representatives is available at <http://www.silabs.com>.

Customers may approve early PCN acceptance by emailing approval, along with PCN # to PCNEarlyAcceptance@silabs.com

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Qualification Data

Please see Qualification Report below.



Si84xyy / Si86xyy AEC-Q100 Qualification Report

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Part Rev B, Vanguard Fabrication, ASECL Assembly except as noted

Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status
Test Group A – Accelerated Environment Stress Tests - 08-SOIC-150mil (UTAC)							
HAST	JA110	3 lots, N=>77	Q045941	0/77	2	3 lots 0/231	Pass
	130°C, 85%RH		Q045942	0/77	2		
	Vcc=5V, 96 hours		Q045943	0/77	2		
UHAST	JA110	3 lots, N=>77	Q045905	0/87	2	3 lots 0/261	Pass
	130°C, 85%RH		Q045906	0/87	2		
	96 hours		Q045907	0/87	2		
Temp Cycle	JA104	3 lots, N=>77	Q045902	0/84	2	3 lots 0/258	Pass
	Cond C: -65°C to 150°C		Q045903	0/86	2		
	500 cycles		Q045904	0/88	2		
HTSL	JA103	1 lot, N=>45	Q045899	0/35	2	3 lots 0/105	Pass
	150°C, 1000hr		Q045900	0/35	2		
			Q045901	0/35	2		
Test Group C – Package Assembly Integrity Tests - 08-SOIC-150mil (UTAC)							
Wire Bond Shear	AEC-Q100-001	5 units, N=>30	1014121	0/5		3 lots 0/15	Pass
			1014123	0/5			
			1014125	0/5			
Wire Bond Pull	M-STD-883 Performed post-TC	5 units, N=>30	1014121	0/5		3 lots 0/15	Pass
			1014123	0/5			
			1014125	0/5			
Physical Dimensions	JB100	3 lots, N=>10	1014121	0/30		3 lots 0/90	Pass
			1014123	0/30			
			1014125	0/30			
Solderability	JB102	1 lot, N=>15	1014121	0/10		3 lots 0/30	Pass
			1014123	0/10			
			1014125	0/10			
Test Group E – Electrical Verification							
ESD-CDM	AEC-Q100-011	1 lot, N=>3	Q045849	08-SOIC-150	UTAC	1.25 kV	Class C3

Notes:

2. Parts are Pre-conditioned at MSL 2 @ 260°C



SI823x AEC-Q100 Qualification Report

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Part Rev B, Vanguard Fabrication, ASECL Assembly except as noted							
Test Name	Test Condition	Qualification	Lot ID or Start	Fail/Pass or End	Notes	Summary	Status
Test Group A – Accelerated Environment Stress Tests - 16-SOIC-150mil (UTAC)							
HAST	JA110 130°C, 85%RH Vcc=5.5V, 96 hours	3 lots, N=>77	Q045925	0/77	2, 4		Pass
			Q045926	0/77	2, 4	3 lots	
			Q045927	0/77	2, 4	0/231	
UFAST	JA110 130°C, 85%RH 96 hours	3 lots, N=>77	Q045937	0/87	2, 4		Pass
			Q045938	0/87	2, 4	3 lots	
			Q045939	0/85	2, 4	0/259	
Temp Cycle	JA104 Cond C: -65°C to 150°C 500 cycles	3 lots, N=>77	Q045934	0/87	2, 4		Pass
			Q045935	0/87	2, 4	3 lots	
			Q045936	0/87	2, 4	0/261	
HTSL	JA103 150°C, 1000hr	1 lot, N=>45	Q045928	0/35	2, 4		Pass
			Q045929	0/35	2, 4	3 lots	
			Q045930	0/35	2, 4	0/105	
Test Group C – Package Assembly Integrity Tests - 16-SOIC-150mil (UTAC)							
Wire Bond Shear	AEC-Q100-001	5 units, N=>30	1024227	0/5			Pass
			1024228	0/5		3 lots	
			1024229	0/5		0/15	
Wire Bond Pull	M-STD-883 Performed post-TC	5 units, N=>30	1024227	0/5			Pass
			1024228	0/5		3 lots	
			1024229	0/5		0/15	
Physical Dimensions	JB100	3 lots, N=>10	1024227	0/30			Pass
			1024228	0/30		3 lots	
			1024229	0/30		0/90	
Solderability	JB102	1 lot, N=>15	1024227	0/10			Pass
			1024228	0/10		3 lots	
			1024229	0/10		0/30	
Test Group E – Electrical Verification							
ESD-CDM	AEC-Q100-011	1 lot, N=>3	Q046091	16-SOIC-150	UTAC	1.25 kV	Class C3

Notes:

- Parts are Pre-conditioned at MSL 2 @ 260°C
- New Polyimide material used



Si84xxyy / Si86xxyy AEC-Q100 Qualification Report

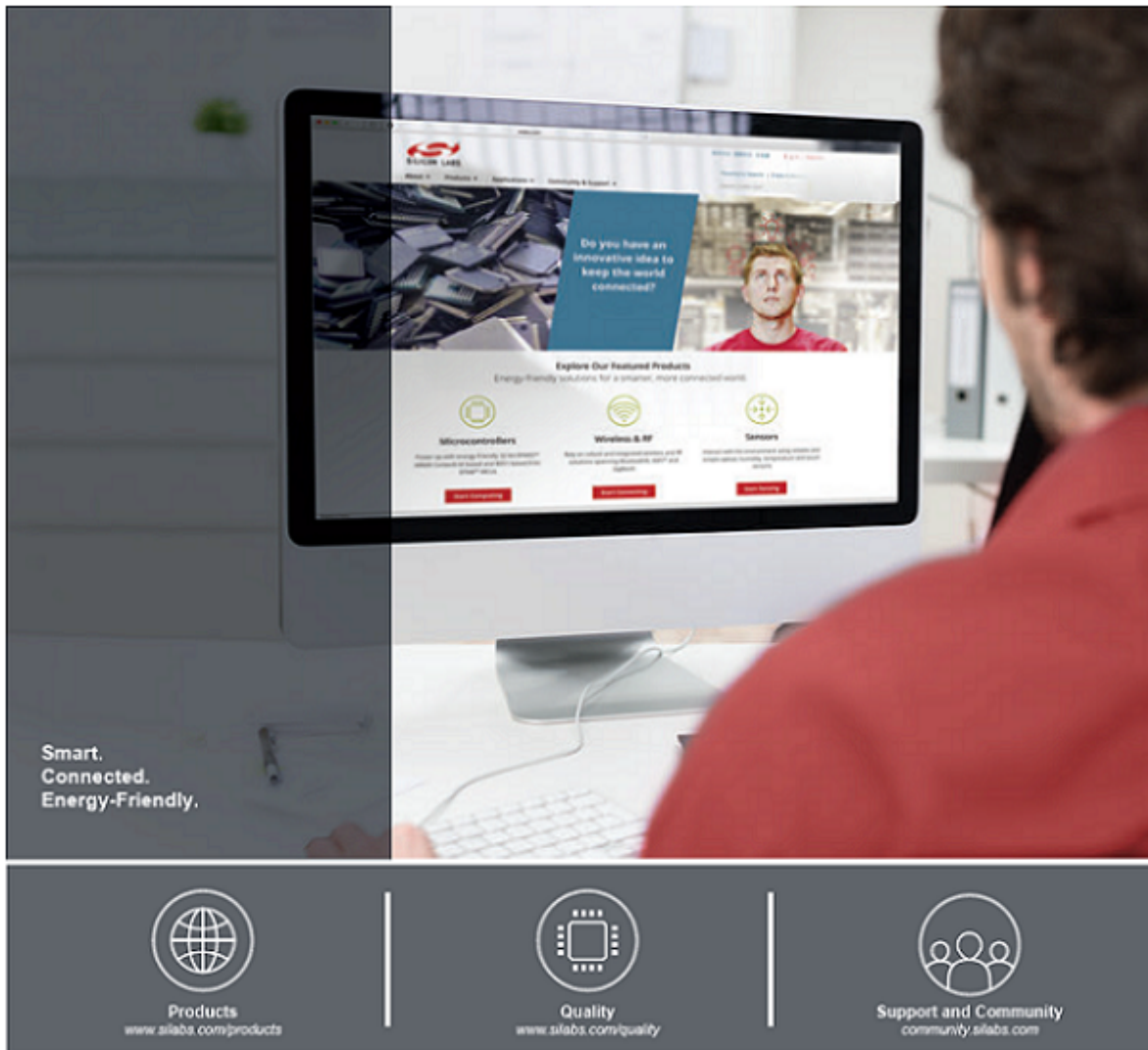
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Part Rev B, Vanguard Fabrication, ASECL Assembly except as noted

Test Name	Test Condition	Qualification	Lot ID of Start	Fail/Pass or End	Notes	Summary	Status
Test Group A – Accelerated Environment Stress Tests - 16-SOIC-150mil (UTAC)							
HAST	JA110 130°C, 85%RH Vcc=5V, 96 hours	3 lots, N=>77	Q045909	0/77	2	3 lots 0/231	Pass
			Q045910	0/77	2		
			Q045911	0/77	2		
UHAST	JA110 130°C, 85%RH 96 hours	3 lots, N=>77	Q045921	0/87	2	3 lots 0/261	Pass
			Q045922	0/87	2		
			Q045923	0/87	2		
Temp Cycle	JA104 Cond C: -65°C to 150°C 500 cycles	3 lots, N=>77	Q045918	0/87	2	3 lots 0/261	Pass
			Q045919	0/87	2		
			Q045920	0/87	2		
HTSL	JA103 150°C, 1000hr	1 lot, N=>45	Q045912	0/35	2	3 lots 0/105	Pass
			Q045913	0/35	2		
			Q045914	0/35	2		
Test Group C – Package Assembly Integrity Tests - 16-SOIC-150mil (UTAC)							
Wire Bond Shear	AEC-Q100-001	5 units, N=>30	1024230	0/5		3 lots 0/15	Pass
			1024231	0/5			
			1024232	0/5			
Wire Bond Pull	M-STD-883 Performed post-TC	5 units, N=>30	1024230	0/5		3 lots 0/15	Pass
			1024231	0/5			
			1024232	0/5			
Physical Dimensions	JB100	3 lots, N=>10	1024230	0/30		3 lots 0/90	Pass
			1024231	0/30			
			1024232	0/30			
Solderability	JB102	1 lot, N=>15	1024230	0/10		3 lots 0/30	Pass
			1024231	0/10			
			1024232	0/10			
Test Group E – Electrical Verification							
ESD-CDM	AEC-Q100-011	1 lot, N=>3	Q046092	16-SOIC-150	UTAC	1.25 kV	Class C3

Notes:

2. Parts are Pre-conditioned at MSL 2 @ 260°C



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